List of Symbols / Abbreviations

$\#S$	cardinality (number of elements) of set S
π	generally used for denoting problem instances; *also:* direct search transition function (GLSM model)
Π	generally used for denoting a problem class
a, a_i	search space positions, *for SAT:* propositional assignments
AIS	the All-Interval-Series Problem
AIS(n)	instance of the All-Interval-Series Problem with length n
blmin	branching of local minima states
BPLAT	plateau border state
BWP	Blocks World Planning Problem
draw	random selection function, selects element from given set according to uniform random distribution
D, D', D''	generally used for denoting probability distributions
$\mathcal{D}(\mathcal{X})$	the set of all probability distributions over set X
CSP	Constraint Satisfaction Problem (usually over finite, discrete domains)
cvr	clauses per variable ratio (for Random-3-SAT)
e, e'	probabilistic events, *i.e.* elements of the domain of a probability distributions
EPAC	exponentially distributed, probabilistically approximately complete
FSM	finite state machine
GCP	the Graph Colouring Problem
GCP(G, k)	graph colouring instace with graph G and k colours
GLSM	generalised local search machine
HC	Hamilton Circuit

HCP	Hamilton Circuit Problem
init	local search initialisation function
IPLAT	interior plateau state
LMAX	local maximum state
LMIN	local minimum state
lsc	local search cost
M,M_i,M_i'	generally used for denoting GLSM instances
N	neighbourhood relation (for local search)
$\mathcal{NP}$	complexity class $\mathcal{NP}$ (non-deterministic, polynomial time)
$\mathbb{N}$	the set of natural numbers, including zero
p, p_i	generally denote probabilities
$\mathcal{P}$	complexity class $\mathcal{P}$ (deterministic, polynomial time)
PAC	probabilistically approximately complete
$\mathbb{R}$	the set of real numbers
$\mathbb{R}^+$	the set of positive real numbers (without 0)
SAT	the Propositional Satisfiability Problem
sdnclu	standard deviation of the objective function (*i.e.*, number of unsatisfied clauses) for SLS-based SAT algorithms
SQD	solution quality distribution
stddev	standard deviation
SLMAX	strict local maximal state
SLMIN	strict local minimum state
SLOPE	slope state
SLS	stochastic local search
step	local search step function
TSP	the Travelling Salesperson Problem
UNSAT	the Propositional Unsatisfiability Problem (complement of SAT)
VAL	the Propositional Validity Problem
$\mathbb{Z}_n$	$= \{0, 1, \ldots, n-1\}$ the integer residues modulo n